

**Please amend the claims as follows:**

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Canceled).
5. (Currently amended) A method of designing a dietary and/or a pharmaceutical regimen for a human or a veterinary animal comprising
  - (i) determining *ex vivo* a baseline cytokine level in a body sample of the human or the veterinary animal, wherein the cytokine is ~~associated with an inflammatory and/or immunomodulating pathway~~ TGF- $\beta$ ;
  - (ii) incubating the body sample with a ~~series compound selected from the group of flavanols and procyanidins, and/or derivatives thereof, or~~ flavanol, procyanidin and a mixture thereof, under conditions sufficient to induce a change in the baseline cytokine ~~levels~~ level and measuring the resulting cytokine ~~levels~~ level;
  - (iii) comparing the baseline cytokine ~~levels~~ level obtained in step (i) with the resulting cytokine ~~levels~~ level obtained in step (ii) to determine cytokine responsiveness of the human or the veterinary animal to ~~flavanols and procyanidins~~ flavanol and/or procyanidin;
  - (iv) designing, based on the cytokine responsiveness, a pharmaceutical and/or dietary regimen to ~~promote homeostatic increase or decrease the baseline~~ cytokine ~~levels~~ level in the human or the veterinary animal, wherein the pharmaceutical and/or dietary regimen comprises administration of a flavanol and/or a procyanidin oligomer and/or a ~~derivative thereof, or a~~ mixture thereof.
6. (Currently amended) A method of designing a dietary and/or a pharmaceutical regimen for a human or a veterinary animal comprising
  - (i) determining *ex vivo* a baseline cytokine level in a body sample of the human or the veterinary animal, wherein the cytokine is ~~associated with an inflammatory and/or immunomodulating pathway~~ TGF- $\beta$ ;
  - (ii) incubating the body sample with a ~~series compound selected from the group of flavanols and procyanidins, and/or derivatives thereof, or~~ flavanol, procyanidin and a mixture thereof, under conditions sufficient to induce a change in the baseline cytokine ~~levels~~ level and measuring the resulting cytokine ~~levels~~ level;

(iii) comparing the baseline cytokine level obtained in step (i) with the resulting cytokine levels level obtained in step (ii) to determine cytokine responsiveness of the human or the veterinary animal to ~~flavanols and procyanidins~~ flavanol and/or procyanidin;

(iv) diagnosing, based on the cytokine responsiveness, whether the human or the veterinary animal is at risk of, or suffers from, a condition associated with ~~inflammatory and/or immunomodulating pathways~~ a TGF- $\beta$  pathway; and

(v) designing a pharmaceutical and/or dietary regimen effective for prophylactic or therapeutic treatment of the condition diagnosed in step (iv).

7. (Currently amended) The method of claim 6, wherein the pharmaceutical and/or dietary regimen comprises administration of a flavanol and/or a procyanidin oligomer ~~and/or a derivative thereof~~.

8. (Original) The method of claim 6, wherein the condition is cardiovascular disease, coronary heart disease, cardiac fibrosis, atherosclerosis, and/or renal disease or failure.

9. (Canceled).

10. (Canceled).

11. (Canceled).

12. (Canceled).

13. (Currently amended) The method of claim 5 further comprising the step of  
(v) administering a flavanol and/or a procyanidin oligomer ~~and/or a derivative thereof, or a mixture thereof~~, to the human or the veterinary animal according to the pharmaceutical and/or dietary regimen designed in step (iv).

14. (Original) The method of claim 6 further comprising the step of  
(vi) treating the human or the veterinary animal according to the pharmaceutical and/or dietary regimen designed in step (v).

15. (Currently amended) The method of claim 14, wherein the pharmaceutical and/or dietary regimen comprises administration of a flavanol and/or a procyanidin oligomer ~~and/or a derivative thereof~~.

16. (Original) The method of claim 14, wherein the condition is cardiovascular disease, coronary heart disease, cardiac fibrosis, atherosclerosis, and/or renal disease or failure.

17. (Canceled).

18. (Currently amended) The method of claims ~~1, 2, 5, 6, 7, 8, 9, or 10~~, 13, 14, 15 or 16, wherein the cytokine is TGF- $\beta$ 1.

4

{W:\DOCS\NJPC\1010\0133us\100005123.DOC}

Amendment and Response to Office Action  
Mailed May 30, 2006  
US Appl. Ser. No. 10/725,805  
Filed December 2, 2003

19. (Withdrawn).
20. (Withdrawn).
21. (Withdrawn).
22. (Withdrawn).
23. (Withdrawn).
24. (Withdrawn).
25. (Withdrawn).
26. (Withdrawn).
27. (Withdrawn).
28. (Withdrawn).
29. (Canceled).
30. (Canceled).
31. (Canceled).
32. (Canceled).
33. (New) The method of claim 5, 6, 7, 8, 13, 14, 15, or 16, wherein the body sample is blood or a fraction thereof.

(W:\DOCS\NJC\1010\0133us1\00005123.DOC)

5

Amendment and Response to Office Action  
Mailed May 30, 2006  
US Appl. Ser. No. 10/725,805  
Filed December 2, 2003